3-month summary

- From April, the chance of a warm period is higher than normal
- Higher than normal chance of a dry spring
- Near average or wet conditions are still possible

3-month likelihood of impact

Temperature

15% chance the season will be COOL	50% chance the season will be NEAR AVERAGE	35% chance the season will be WARM
0.8× the normal chance	0.8× the normal chance	1.8× the normal chance

Precipitation

30% chance the season will be DRY	60% chance the season will be NEAR AVERAGE	10% chance the season will be WET
1.5× the normal chance	1.0× the normal chance	0.5× the normal chance

Wind speed

30% chance the season will be CALM	55% chance the season will be NEAR AVERAGE	15% chance the season will be WINDY
1.5× the normal chance	0.9× the normal chance	0.8× the normal chance

1-month summary

- The chance of a cold March is higher than normal
- Increased chances of impacts from cold weather such as snow, frost and fog
- March is more likely to be dry than wet

1-month likelihood of impact

Temperature

30% chance the month will be COLD	60% chance the month will be NEAR AVERAGE	10% chance the month will be MILD
1.5× the normal chance ▲	1.0× the normal chance ▲▼	0.5× the normal chance ▼

Precipitation

30% chance the month will be DRY	60% chance the month will be NEAR AVERAGE	10% chance the month will be WET
1.5× the normal chance ▲	1.0× the normal chance ▲▼	0.5× the normal chance ▼

Wind speed

35% chance the month will be CALM	60% chance the month will be NEAR AVERAGE	5% chance the month will be WINDY
1.8× the normal chance ▲	1.0× the normal chance ▲▼	0.3× the normal chance ▼

Understanding the Outlook

The Outlook uses 3 categories for possible UK temperature, precipitation and wind speed in the next 1 and 3 months:

COLD, NEAR AVERAGE and MILD for 1-month temperature
COOL, NEAR AVERAGE and WARM for 3-month temperature
WET, NEAR AVERAGE and DRY for precipitation
CALM, NEAR AVERAGE and WINDY for wind speed

These are linked to observed UK conditions in past years. The NEAR AVERAGE category represents typical conditions for the period and has a normal likelihood of 60%. The higher and lower categories represent more unusual conditions that are more likely to produce impacts. Each has a normal likelihood of 20%.

The Outlook shows how the chances of occurrence of the categories differ from normal, based on knowledge of expected global meteorological patterns. It does not identify which category will actually occur.

Same 3-month period over the last 10 years

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
COOL	WARM	NEAR AVERAGE	NEAR AVERAGE	WARM	NEAR AVERAGE	NEAR AVERAGE	WARM	COOL	WARM
NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	DRY	NEAR AVERAGE	NEAR AVERAGE	DRY	NEAR AVERAGE	DRY
WINDY	NEAR AVERAGE	NEAR AVERAGE	CALM	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	CALM	CALM

Same 1-month period over the last 10 years

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
COLD	MILD	NEAR AVERAGE	NEAR AVERAGE	MILD	COLD	MILD	NEAR AVERAGE	MILD	MILD
DRY	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	WET	NEAR AVERAGE	NEAR AVERAGE	DRY
NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	CALM	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	CALM

Outlook in context

Drivers of UK weather for March to May
The impact of global weather patterns acts to shift the chances of the categories in the Outlook. Drivers relevant to the current Outlook are:
• La Niña, which increases the chance of westerly winds early in the period
• The recent major Sudden Stratospheric Warming increases the chance of easterly winds through the first half of the period
• The Madden Julian Oscillation crossing the Pacific Ocean increases the chance of northerly or easterly winds in early March
• The warming of UK climate consistent with wider global warming trends

Long-range weather predictions
The Met Office and other prediction centres around the world routinely produce long-range predictions of conditions in the months ahead. Consistent with the observed response to SSWs, long-range models are in good agreement in predicting an increased chance of easterly winds during March with high pressure to the north and low pressure to the south of the UK. For March-April-May as a whole, there is reasonable agreement for increased chances of high pressure to be near the UK. However, there is uncertainty as to whether high pressure could be centred across or to the north of the UK. This would influence the frequency of rain-bearing systems, particularly across southern areas.

Impact
Easterly winds are often associated with cold weather from late autumn through to early spring. Consistent with this, there is an increased chance of a cold March with impacts from snow, ice and fog more likely than usual at this time of year. The increased chance of warm conditions through the spring as a whole is consistent with our warning climate. An increase in the likelihood of dry conditions means that impacts from heavy rain and strong winds are lower than normal, both in March and the spring as a whole. Wetter spells of weather are still possible at times, particularly across southern parts of the UK, with north and northwestern areas more likely to be drier than average.

Outlook compared to normal likelihood

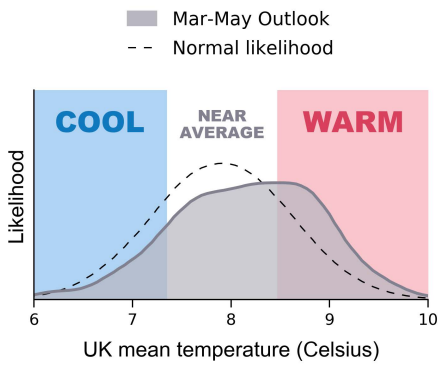
The curves below show the likelihood of the 1- and 3-month average temperature, precipitation and wind speed taking specific values. In each case:

- The dashed curve shows the normal likelihood based on how often each value has been recorded in past years
- The solid curve shows the current likelihood based on the Outlook for this year

The differences in these curves show how the probabilities for the coming periods differ compared to past years. Where the solid curve (corresponding to this year's Outlook) lies above the dashed curve (normal likelihood), the temperature, precipitation or wind speed at that point has a greater-than-normal likelihood of occurring. Likewise, wherever it is below the dashed curve, the likelihood of those values is less than normal.

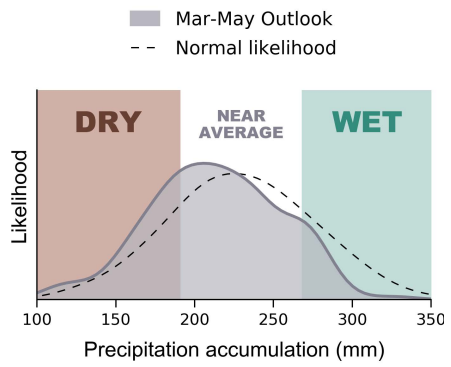
A shift of the solid curve to the left of the dashed curve indicates an increase in the chances of below-average temperature, rainfall or winds. A shift to the right, meanwhile, indicates increased chances of above-average values.

3-month temperature Outlook compared to normal



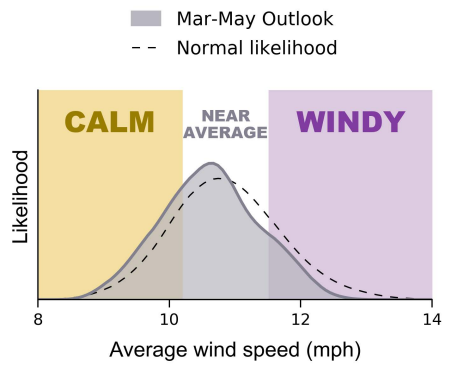
Likelihood leans towards warm

3-month precipitation Outlook compared to normal



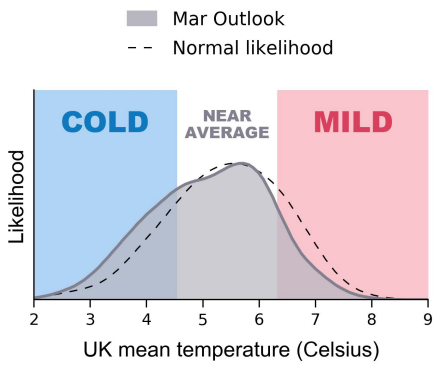
Likelihood leans towards dry

3-month wind speed Outlook compared to normal



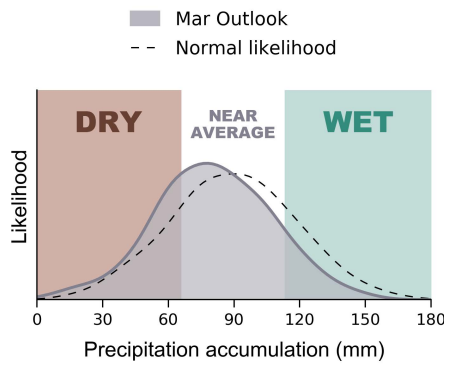
Likelihood leans moderately towards calm

1-month temperature Outlook compared to normal



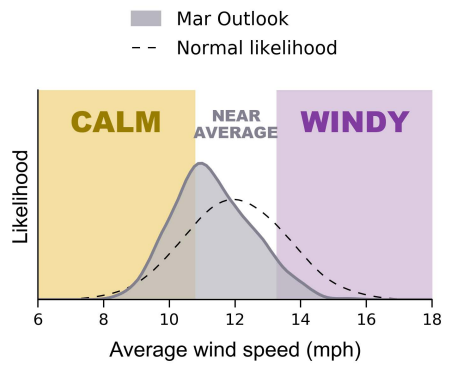
Likelihood leans towards cold

1-month precipitation Outlook compared to normal



Likelihood leans towards dry

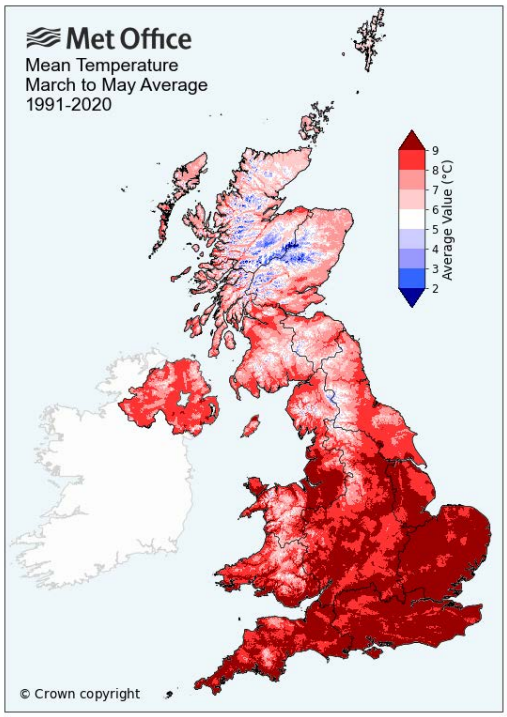
1-month wind speed Outlook compared to normal



Likelihood leans towards calm

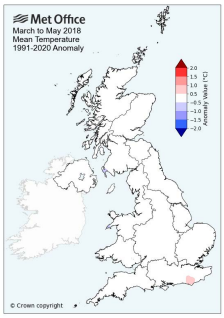
Long-term average temperatures (3-month)

This page shows the long-term average temperatures across the UK applicable to the 3-month Outlook period.

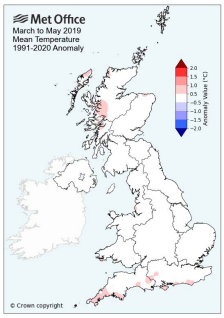


Average temperatures for March - May based on observations of past years.

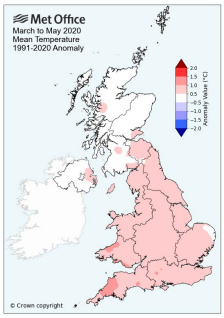
Last 5 years temperatures, difference from average (3-month)



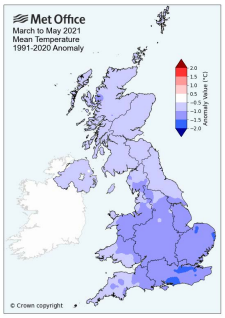
Mar - May 2018



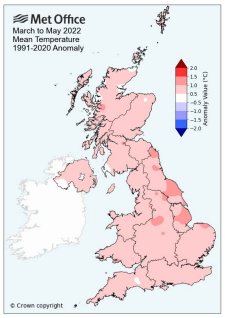
Mar - May 2019



Mar - May 2020



Mar - May 2021



Mar - May 2022

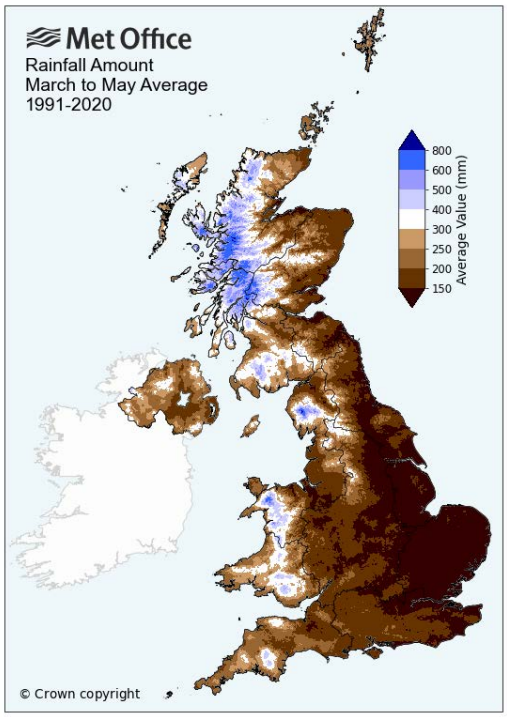
Anomaly (°C)

< -2.0	-2.0 to -1.5	-1.5 to -1.0	-1.0 to-0.5	-0.5 to 0.5	0.5 to 1.0	1.0 to 1.5	1.5 to 2.0	> 2.0

These maps show how March - May temperatures in the last five years differed from the long-term average temperatures shown above in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

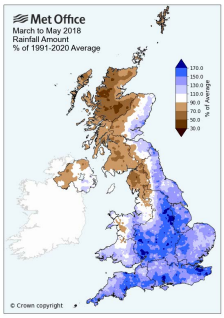
Long-term average precipitation (3-month)

This page shows the long-term average precipitation across the UK applicable to the 3-month Outlook period.

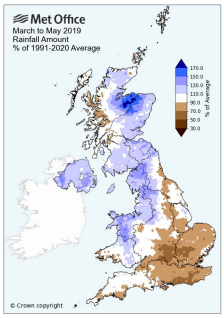


Average precipitation for March - May based on observations of past years.

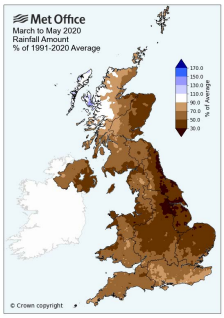
Last 5 years precipitation, difference from average (3-month)



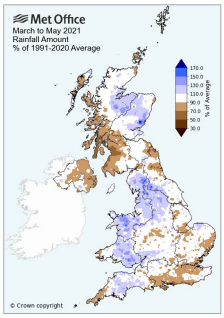
Mar - May 2018



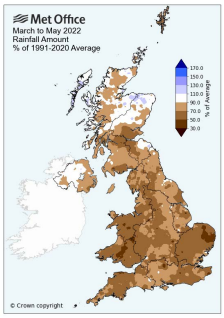
Mar - May 2019



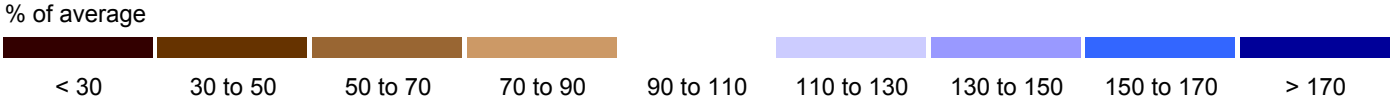
Mar - May 2020



Mar - May 2021



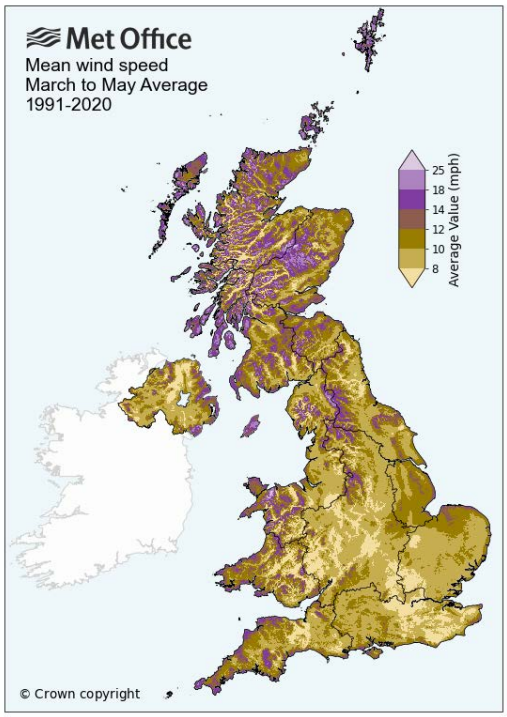
Mar - May 2022



These maps show how March - May precipitation in the last five years differed from the long-term average precipitation shown above in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

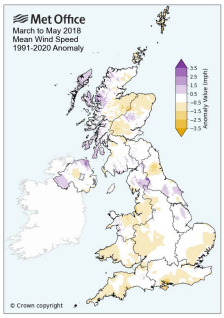
Long-term average wind speed (3-month)

This page shows the long-term average wind speed across the UK applicable to the 3-month Outlook period.

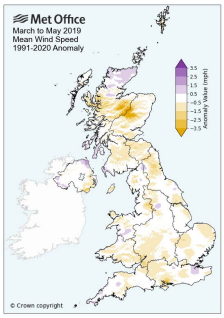


Average wind speed for March - May based on observations of past years.

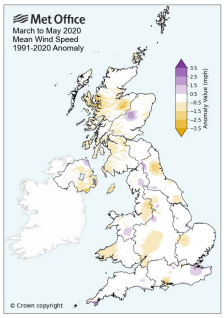
Last 5 years wind speed, difference from average (3-month)



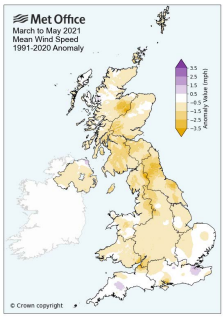
Mar - May 2018



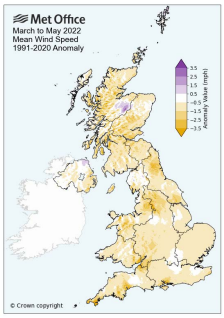
Mar - May 2019



Mar - May 2020



Mar - May 2021



Mar - May 2022

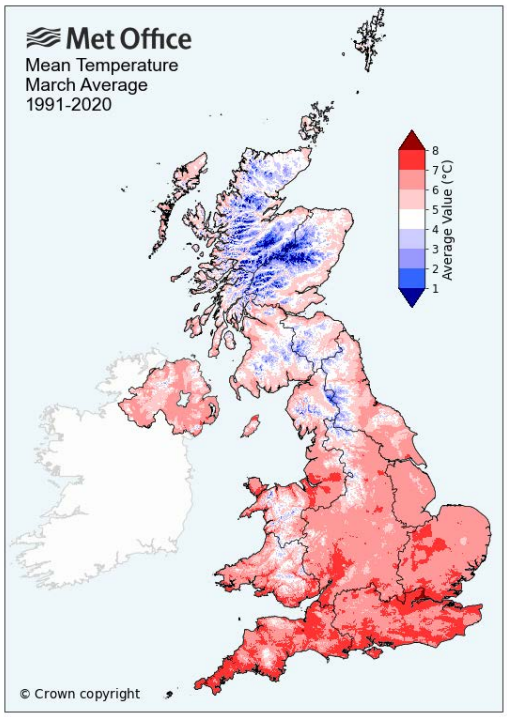
Anomaly (mph)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how March - May wind speed in the last five years differed from the long-term average wind speeds shown above in the upper panel. Yellow colours indicate calmer-than-average conditions while purple shades indicate windier-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

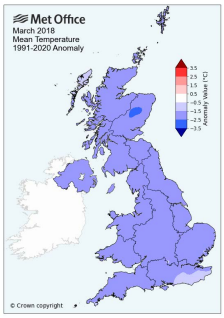
Long-term average temperatures (1-month)

This page shows the long-term average temperatures across the UK applicable to the 1-month Outlook period.

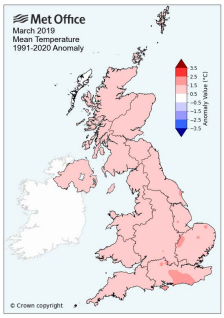


Average temperatures for March based on observations of past years.

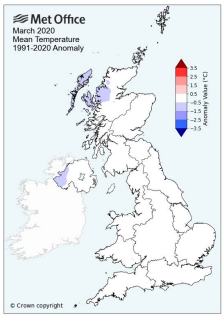
Last 5 years temperatures, difference from average (1-month)



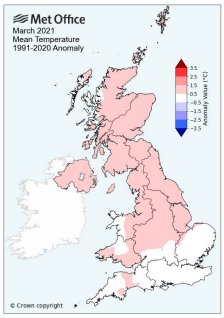
Mar 2018



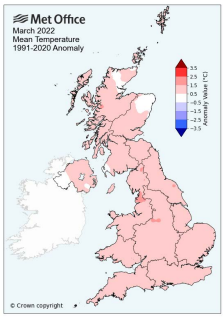
Mar 2019



Mar 2020



Mar 2021



Mar 2022

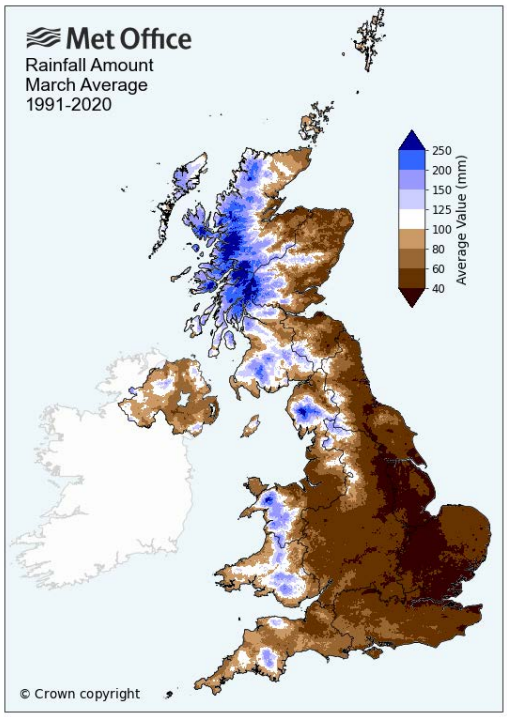
Anomaly (°C)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how March temperatures in the last five years differed from the long-term average temperatures shown above in the upper panel. Pink and red colours indicate milder-than-average conditions while blue shades indicate colder-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

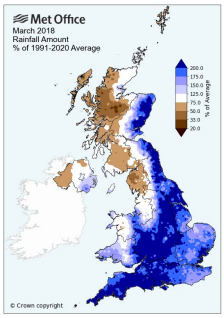
Long-term average precipitation (1-month)

This page shows the long-term average precipitation across the UK applicable to the 1-month Outlook period.

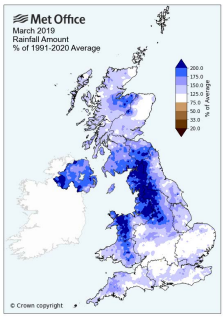


Average precipitation for March based on observations of past years.

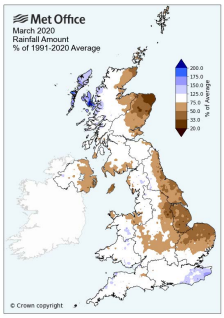
Last 5 years precipitation, difference from average (1-month)



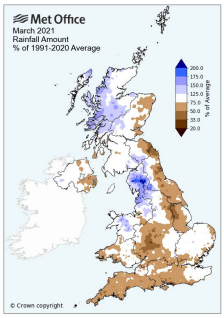
Mar 2018



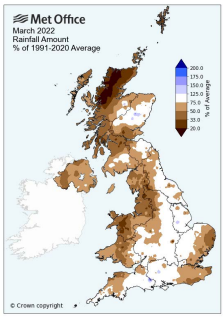
Mar 2019



Mar 2020



Mar 2021



Mar 2022

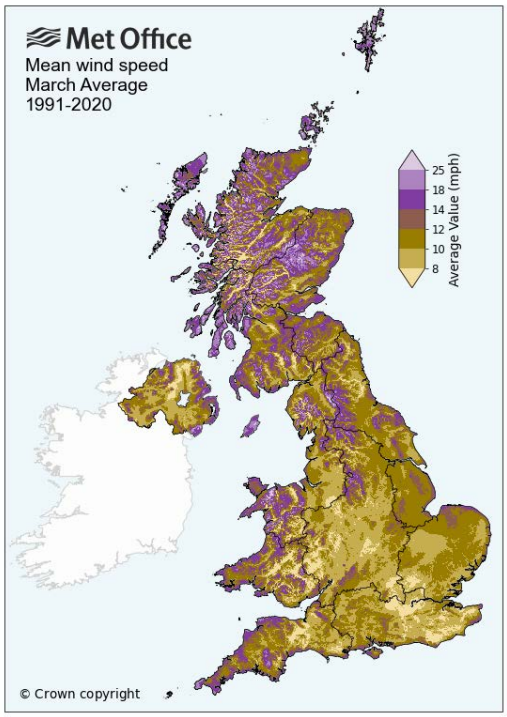
% of average

< 20	20 to 33	33 to 50	50 to 75	75 to 125	125 to 150	150 to 175	175 to 200	> 200

These maps show how March precipitation in the last five years differed from the long-term average precipitation shown above in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

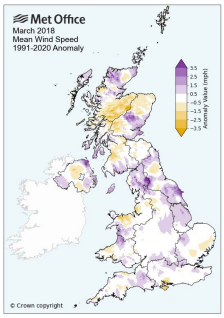
Long-term average wind speed (1-month)

This page shows the long-term average wind speed across the UK applicable to the 1-month Outlook period.

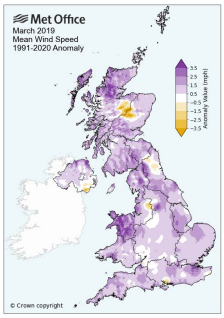


Average wind speed for March based on observations of past years.

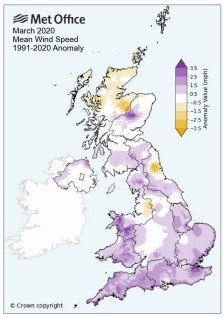
Last 5 years wind speed, difference from average (1-month)



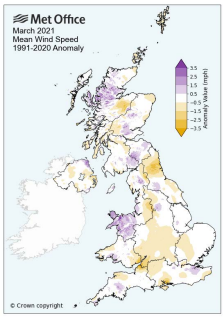
Mar 2018



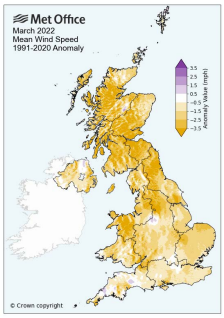
Mar 2019



Mar 2020



Mar 2021



Mar 2022

Anomaly (mph)

< -3.5	-3.5 to -2.5	-2.5 to -1.5	-1.5 to -0.5	-0.5 to 0.5	0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	> 3.5

These maps show how March wind speed in the last five years differed from the long-term average wind speeds shown above in the upper panel. Yellow colours indicate calmer-than-average conditions while purple shades indicate windier-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

Q&As

Q. What is the point of the Outlook, who is it meant for?
A. This Outlook is produced for planners in government and business who make risk-based decisions. These users are aware of the complexities of this type of outlook and will include those factors in their decision-making process.

Q. How did you decide on the Outlook? What are the main factors affecting it?
A. It is based on information from observations, several numerical prediction systems and expert judgement. See the 'Outlook in Context' section of the Outlook for more details.

Q. Is the Outlook for the whole country?
A. The Outlook is for the average of conditions over the UK as a whole. Regional deviations from the UK-average can occur. For example, average UK precipitation can result from below-average rainfall for the northwest and above-average for the southeast.

Q. How confident are you in this Outlook?
A. The percentages in the 'Likelihood of Impact' sections of the Outlook give the level of confidence.

Q. Should we expect snow this March?
A. While the chances of a warm spring are higher than normal there is an increased risk we could see colder conditions earlier in the season. The recent Sudden Stratospheric Warming (SSW) increases the chances of easterly winds and spells of cold weather in March. However, this Outlook concerns weather themes for the country as a whole and does not give any indication of when cold spells might come along, how severe they might be, or whether or not we will have snow. For more information on these more detailed aspects, keep up to date with our shorter-range forecasts on the Met Office website.

Q. Is there a chance we could see a return of drought conditions?
For both March and March-April-May, this Outlook indicates a higher-than-normal chance of dry conditions. This follows on from a relatively dry February for many parts of the UK. Regional variations in rainfall within the UK can be substantial though. Wetter spells are still possible at times, particularly across the south and east, with the north and north-western areas most likely to be drier than usual. The exact impact of rainfall (or lack thereof) on water resources is complex, going beyond meteorology into hydrology and water management. The Met Office contributes to the UK Centre of Ecology and Hydrology (UKCEH) Hydrological Outlook, and it is recommended that detailed questions about long-term hydrological prospects and impacts be referred to UKCEH or EA.
http://ww.hydoutuk.net/

Q. What influence will the Sudden Stratospheric Warming (SSW) have?
A. An SSW is currently underway, increasing the chance of easterly winds for the UK during March, with high pressure to the north and low pressure to the south of the UK. Historically, most of these events have led to at least a short spell of cold weather, and some have had effects on UK weather over many weeks. This year's SSW event increases the chances of colder weather in March, but it is not inevitable that we will see prolonged freezing, snowy conditions. Less intense outcomes are possible, including only minor changes in UK weather patterns. Keep up to date with our shorter-range forecasts on the Met Office website for the latest forecast information about potential cold spells.

About the Outlook

The Outlook presented here is for United Kingdom as a whole and is based on information from observations, several numerical prediction systems and expert judgement. It is updated monthly to reflect the latest information on global weather patterns and their effect on the UK. The Outlook is designed to be used in conjunction with shorter-range forecasts – detailed weather forecast information is available on the Met Office website.

In this product, temperature refers to the average of daytime maxima and night-time minima. Wind speed refers to the average wind speed at a height of 10 metres. All numerical values relate to averages (temperature, wind speed) or totals (precipitation – rain, sleet, snow and hail) over 1 or 3 months, which are further averaged over the UK land area as a whole. Normal likelihood and long-term averages are established using the period 1991-2020.

Find out more

- UK 3-month Outlook user guidance page:
  https://www.metoffice.gov.uk/services/government/contingency-planners/user-guidance/user-guidance
- Explainers on climate drivers (such as the El Niño Southern Oscillation and North Atlantic Oscillation) that influence seasonal forecasts and the impacts they can have on UK weather:
  https://www.metoffice.gov.uk/services/government/contingency-planners/seasonal-forecasts-and-climate-drivers-resources
- Contingency planners page:
  https://www.metoffice.gov.uk/services/government/contingency-planners/index

Contact us

Website:
www.metoffice.gov.uk

Email:
enquiries@metoffice.gov.uk

Provide your feedback

We would like to hear your feedback on the UK 3-month Outlook to understand how it is being used. Please fill in the short form using this link or QR code to share your thoughts.